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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TYSON, MELANIE RUANO

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/728,516	Applicant(s) EIDENSCHINK ET AL.	
	Examiner Melanie Tyson	Art Unit 3773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 35-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 35-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Applicant's amendment received on 19 December 2007.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7-9, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Richter (2002/0107560). Richter discloses a self-expanding stent (see entire document) comprising a plurality of serpentine bands (for example, see Figure 3), adjacent bands connected to one another by permanent connector struts (5) from peak to valley, and adjacent serpentine bands being connected to one another by at least one disengagable connector strut (4) from valley to peak. Applicant discloses that any suitable metallic material may be utilized to construct the electrolytic disengagable connector strut and lists Nitinol as an example (page 8). Since the disengagable connector strut of Richter is formed of Nitinol (for example, see paragraph 22), then it is constructed (Nitinol material) and arranged (connected between adjacent bands from valley to peak) to enable disengagement by electrolytic detachment if one desires to disengage via electrolytic detachment.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 2-6 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter.

With respect to claim 2, Richter fails to disclose the corrosion potential of the materials used to construct the disengagable strut and serpentine bands. However, Richter discloses the disengagement struts may be made of weaker material than the remaining components to ensure appropriate separation (paragraphs 21 and 22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the disengagable connector strut from a material having a higher corrosion potential than the material used to form the serpentine bands, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice.

With respect to claims 3-6, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the stent with an electrical lead in order to disengage the disengagable connector, since such detachment means is well

known in the art (for example, see entire document of Acosta's 2004/0093061 A1 - for example, see paragraph 27).

With further respect to claims 10-12, the applicant discloses a necked portion may be provided on the ends of the disengagable connector strut connected to the band or located at the center of the disengagable connector strut (Figures 3 and 4). Applicant further discloses in the specification that the disengagable connector strut may be provided in any geometric shape and/or size (page 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the stent with a necked portion as claimed in claims 10-12, since such shapes, or detachment points, are well known in the art (for example, see entire document of Acosta's 2004/0093061 A1 – for example, see Figure 7; for example, see entire document of Mitsudou et al. 7,029,492 B1 – for example, see Figure 10).

6. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camrud (6,258,117 B1). Camrud discloses a self-expanding stent (see entire document) comprising a first serpentine band (for example, see Figures 7a-7b), a second serpentine band, and a permanent connector strut (108) connecting the first to the second band. The embodiment of Figures 7a-7b fails to show a disengagable connector strut. However, Camrud further discloses embodiments comprising disengagable connectors, such that portions of the adjacent stent sections are manufactured to separate, thus providing increased flexibility (for example, see column 1, lines 48-66). Camrud further discloses that modifications may be made (for example, see column 11, line1). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to provide the embodiment of Figures 7a-7b with disengagable connector struts as disclosed in the other embodiments. Doing so would provide the stent with increased flexibility, yet still provide an interconnection between adjacent bands that restricts the overall extent of movement (for example, see column 2, lines 55-58 and column 10, lines 10-13).

Response to Arguments

7. Applicant's arguments filed 19 December 2007, with respect to the 35 USC 102(e) rejection over Bashiri have been fully considered and are persuasive, thus the rejection has been withdrawn.

8. Applicant's arguments filed 19 December 2007 with respect to the 35 USC 102(b) and 103(a) rejections over Richter and Camrud have been fully considered but they are not persuasive. Applicant argues primarily that the prior art applied fails to disclose, suggest, or teach each and every element claimed. Examiner respectfully disagrees.

Applicant argues Richter fails to disclose or suggest electrolytic detachment. However, claim 1 recites the limitation "at least one disengagable connector strut that is constructed and arranged to disengage by electrolytic attachment." Since the disengagable connector struts of Richter are constructed and arranged as claimed by the applicant (i.e., connected to adjacent serpentine bands), the disengagable struts are constructed and arranged to disengage by electrolytic detachment if one desires to do so.

Applicant argues the rejections of claims 2-6 and 10-12 fail to assert any prior art teaching that would motivate a person of ordinary skill in the art to choose the claimed configuration(s) over and above any other possible configuration that would have been available. However, the applicant discloses in the specification that the disengagable connector struts may be detached mechanically, electrolytically, or by a combination of the two. Applicant has not disclosed that electrolytic detachment provides an advantage, is used for a particular purpose, or solves a stated problem over mechanical detachment, or the combination of mechanical and electrolytic detachment. Therefore, it would have been obvious to one having ordinary skill in the art to modify the connector struts of Richter as claimed in claims 2 and 10-12 to further facilitate electrolytic detachment. Applicant further argues the prior art cited as evidence fails to teach that electrolytic detachment is well known in the art. However, Acosta et al. clearly teaches electrolytic detachment by way of electrical leads is well known in the art and further discloses providing connector struts with necked portions as claimed in order to facilitate detachment (for example, see paragraphs 27 and Figure 7).

Applicant argues it would not have been obvious to one having ordinary skill in the art to combine the teachings of Camrud, since there is no reason to **add** disengagable connector struts to the embodiment shown in Figure 7A. However, it would have been obvious to one having ordinary skill in the art to **combine** teachings such that some of the permanent connector struts (108) are disengagable. Doing so would provide the advantages stated in paragraph 6 above. Applicant further argues the mass of the metal framework will not reduce as the degradable connections degrade,

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since the degradable connections are not made of metal. However, the claim is not constructed so as to limit everything connected to the metal framework be formed of metal material. Regardless of the material of the degradable connections, they are connected to the metal framework, thus are considered as part of the metal framework. Therefore, when the degradable connections degrade the mass of the metal framework decreases.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Tyson whose telephone number is (571)272-9062. The examiner can normally be reached on Monday through Friday 9-5:30 (max flex).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie Tyson /M. T./
Examiner, Art Unit 3773
February 26, 2008

/(Jackie) Tan-Uyen T. Ho/
Supervisory Patent Examiner, Art Unit 3773